21) IMPOVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT INDIAN EXPRESS LAYOUT AND SURROUNDING AREAS IN WARD NO. 11 (KUVEMPUNAGARA), VIDYARANYAPURA SUB DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 04

(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)

NAME OF WORK : IMPOVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT INDIAN EXPRESS LAYOUT AND SURROUNDING AREAS IN WARD NO. 11 (KUVEMPUNAGARA), VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, Roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	SAI GARDEN LAYOUT								
	1st cross	Cum	2	56.10	0.60	0.40	26.93		
	MUNIKALAPPA LAYOUT								
	1st Main Road	Cum	2	205.50	0.80	0.40	131.52		
		Cum	2	58.63	0.60	0.40	28.14		
	3rd Cross 2nd phase	Cum	2	71.00	0.60	0.40	34.08		
	SONAPPA LAYOUT								
	4th cross	Cum	2	77.00	0.60	0.40	36.96		
	12'A main road (satya green appartment main road)	Cum	2	255.50	0.80	0.40	163.52		
	KODIGEHALLI LAYOUT								
	3rd main road to dead end	Cum	2	52.25	0.75	0.40	31.35		
	2nd cross	Cum	2	50.38	0.60	0.40	24.18		
	4th cross	Cum	2	50.71	0.60	0.40	24.34		
	3rd cross	Cum	2	36.52	0.60	0.40	17.53		
	1st cross	Cum	2	82.06	0.60	0.40	39.39		
	opposite to 1st cross road	Cum	2	82.50	0.60	0.40	39.60		
	SIDDIVINAYAKA LAYOUT								
	6th main road	Cum	2	89	0.80	0.40	57.02		
	4th main road (all cross roads)	Cum	2	413	0.70	0.40	231.00		
		Cum	2	58	0.65	0.40	30.32		
		Cum	2	55	0.65	0.40	28.60		
	4th main dead end road ('T' shape road)	Cum	2	171	0.60	0.40	81.84		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**1026.32**	**166.42**	**170800.51**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Closed Drain								
	Cover Slab								

	MUNIKALAPPA LAYOUT								
	1st Main Road	Sqm	2	205.50	0.80		328.80		
	Open Drain (Sides & bottom)								
	1st Main Road	Sqm	2	58.63	1.80		211.07		
	3rd Cross 2nd phase	Sqm	2	71.00	1.80		255.60		
	Closed Drain								
	Cover Slab								
	SONAPPA LAYOUT								
	12'A main road (satya green appartment main road)	Sqm	2	255.50	0.80		408.80		
	Open Drain (Sides & bottom)								
	SAI GARDEN LAYOUT								
	1st cross	Sqm	2	56.10	1.80		201.96		
	SONAPPA LAYOUT								
	4th cross	Sqm	2	77.00	1.80		277.20		
	KODIGEHALLI LAYOUT								
	3rd main road to dead end	Sqm	2	52.25	1.80		188.10		
	2nd cross	Sqm	2	50.38	1.80		181.37		
	4th cross	Sqm	2	50.71	1.80		182.56		
	3rd cross	Sqm	2	36.52	1.80		131.47		
	1st cross	Sqm	2	82.06	1.80		295.42		
	opposite to 1st cross road	Sqm	2	82.50	1.80		297.00		
	Open Drain (Sides & bottom)								
	SIDDIVINAYAKA LAYOUT								
	6th main road	Sqm	2	89	1.80		320.76		
	4th main road (all cross roads)	Sqm	2	413	1.80		1485.00		
		Sqm	2	58	1.80		209.88		
		Sqm	2	55	1.80		198.00		
	4th main dead end road ('T' shape road)	Sqm	2	171	1.80		613.80		
	Sub total						**5786.78**		
	Consider 5% for Removing						**289.34**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**289.34**	**65.72**	**19015.36**
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Cover Slab								
	MUNIKALAPPA LAYOUT								
	1st Main Road	Sqm	2	205.50	0.80		328.80		

	SONAPPA LAYOUT								
	12'A main road (satya green appartment main road)	Sqm	2	255.50	0.80		408.80		
	Sub total						**737.60**		
	Consider 30% Qnty for Removing & Refixing						**221.28**		
	Basic rate							76.00	
	Area weightage 6%							4.56	
	Total						**221.28**	**80.56**	**17826.32**
4	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Closed Drain								
	Cover Slab								
	MUNIKALAPPA LAYOUT								
	1st Main Road	Sqm	2	205.50	0.80		328.80		
	Closed Drain								
	Cover Slab								
	SONAPPA LAYOUT								
	12'A main road (satya green appartment main road)	Sqm	2	255.50	0.80		408.80		
	Sub total						**737.60**		
	Consider 5% for Refixing						**36.88**		
	Basic rate							628.00	
	Area weightage 6%							37.68	
	Total						**36.88**	**665.68**	**24550.28**
5	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.2)								
	Open Drain (Sides & bottom)								
	SAI GARDEN LAYOUT								
	1st cross	Sqm	2	56.10	1.80		201.96		
	MUNIKALAPPA LAYOUT								
	1st Main Road	Sqm	2	58.63	1.80		211.07		
	3rd Cross 2nd phase	Sqm	2	71.00	1.80		255.60		
	SONAPPA LAYOUT								
	Open Drain (Sides & bottom)								
	4th cross	Sqm	2	77.00	1.80		277.20		
	Open Drain (Sides & bottom)								
	KODIGEHALLI LAYOUT								

	3rd main road to dead end	Sqm	2	52.25	1.80		188.10		
	2nd cross	Sqm	2	50.38	1.80		181.37		
	4th cross	Sqm	2	50.71	1.80		182.56		
	3rd cross	Sqm	2	36.52	1.80		131.47		
	1st cross	Sqm	2	82.06	1.80		295.42		
	opposite to 1st cross road	Sqm	2	82.50	1.80		297.00		
	Open Drain (Sides & bottom)								
	SIDDIVINAYAKA LAYOUT								
	6th main road	Sqm	2	89	1.80		320.76		
	4th main road (all cross roads)	Sqm	2	413	1.80		1485.00		
		Sqm	2	58	1.80		209.88		
		Sqm	2	55	1.80		198.00		
	4th main dead end road ('T' shape road)	Sqm	2	171	1.80		613.80		
	Sub total						**4847.22**		
	Consider 5% for Refixing						**242.36**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**242.36**	**825.74**	**200127.17**
6	KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1)								
	Road cutting portions								
	KODIGEHALLI LAYOUT								
	3rd main road to dead end	Cum	2	5.28	0.60	0.23	1.46		
	Basic rate							82.00	
	Area weightage 6%							4.92	
	Total						**1.46**	**86.92**	**126.67**
7	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	MUNIKALAPPA LAYOUT								
	Considered same Qty vide I.No.1+I.No.6+ I.No.17	Cum					1091.68		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.5Tonne/Km.) For 15 Kms = (2.5x 1.28 x 15)/-		48.00						

	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						**1091.68**	**122.96**	**134232.88**
8	KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18)								
	Road cutting portions								
	KODIGEHALLI LAYOUT								
	3rd main road to dead end	Cum	2	5.28	0.60	0.23	1.46		
	Basic rate							1668.00	
	Area weightage 6%							100.08	
	Total						**1.46**	**1768.08**	**2576.59**
9	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	Road cutting portions								
	KODIGEHALLI LAYOUT								
	3rd main road to dead end	Sqm	2	5.28	0.60		6.34		
	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						**6.34**	**13.78**	**87.31**
10	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6)								
	KODIGEHALLI LAYOUT								
	Considered same Above Qty	Sqm					6.34		
	Basic rate							26.00	
	Area weightage 6%							1.56	
	Total						**6.34**	**27.56**	**174.62**
11	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6)								

	KODIGEHALLI LAYOUT								
	3rd main road to dead end	Cum	2	5.28	0.60	0.05	0.32		
	Consider 5% qty for Profile correction and Dipression filling						**0.02**		
	Basic rate							6717.00	
	Area weightage 6%							403.02	
	Total						**0.33**	**7120.02**	**2368.40**
12	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	SAI GARDEN LAYOUT								
	1st cross	Sqm	1	56.10	4.80		269.28		
	MUNIKALAPPA LAYOUT								
	1st Main Road	Sqm	1	205.50	5.50		1130.25		
		Sqm	1	58.63	5.30		310.74		
	SONAPPA LAYOUT								
	4th cross	Sqm	1	77.00	4.20		323.40		
	12'A main road (satya green appartment main road)	Sqm	1	243.50	4.50		1095.75		
	KODIGEHALLI LAYOUT								
	3rd main road to dead end	Sqm	1	52.25	5.00		261.25		
	5th cross	Sqm	1	56.54	4.20		237.47		
	2nd cross	Sqm	1	50.38	4.10		206.56		
	4th cross	Sqm	1	50.71	4.20		212.98		
	3rd cross	Sqm	1	36.52	4.30		157.04		
	1st cross	Sqm	1	82.06	4.50		369.27		
	opposite to 1st cross road	Sqm	1	82.50	4.30		354.75		
	SIDDIVINAYAKA LAYOUT								
	6th main road	Sqm	1	89.10	4.85		432.14		
	4th main road (all cross roads)	Sqm	1	412.50	5.20		2145.00		
		Sqm	1	58.30	4.30		250.69		
		Sqm	1	55.00	4.40		242.00		
	4th main dead end road ('T' shape road)	Sqm	1	170.50	4.40		750.20		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**8748.76**	**3.18**	**27821.05**
13	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								

	For Road surface								
	SAI GARDEN LAYOUT								
	1st cross	Sqm	1	56.10	4.80		269.28		
	MUNIKALAPPA LAYOUT								
	1st Main Road	Sqm	1	205.50	5.50		1130.25		
		Sqm	1	58.63	5.30		310.74		
	SONAPPA LAYOUT								
	4th cross	Sqm	1	77.00	4.20		323.40		
	12'A main road (satya green appartment main road)	Sqm	1	243.50	4.50		1095.75		
	KODIGEHALLI LAYOUT								
	3rd main road to dead end	Sqm	1	52.25	5.00		261.25		
	5th cross	Sqm	1	56.54	4.20		237.47		
	2nd cross	Sqm	1	50.38	4.10		206.56		
	4th cross	Sqm	1	50.71	4.20		212.98		
	3rd cross	Sqm	1	36.52	4.30		157.04		
	1st cross	Sqm	1	82.06	4.50		369.27		
	opposite to 1st cross road	Sqm	1	82.50	4.30		354.75		
	SIDDIVINAYAKA LAYOUT								
	6th main road	Sqm	1	89.10	4.85		432.14		
	4th main road (all cross roads)	Sqm	1	412.50	5.20		2145.00		
		Sqm	1	58.30	4.30		250.69		
		Sqm	1	55.00	4.40		242.00		
	4th main dead end road ('T' shape road)	Sqm	1	170.50	4.40		750.20		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						**8748.76**	**12.72**	**111284.20**
14	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6)								
	SAI GARDEN LAYOUT								
	1st cross	Cum	1	56.10	4.80	0.04	10.77		
	MUNIKALAPPA LAYOUT								
	1st Main Road	Cum	1	205.50	5.50	0.04	45.21		
		Cum	1	58.63	5.30	0.04	12.43		
	SONAPPA LAYOUT								
	4th cross	Cum	1	77.00	4.20	0.04	12.94		

12'A main road (satya green appartment main road)	Cum	1	255.50	4.50	0.04	45.99		
KODIGEHALLI LAYOUT								
3rd main road to dead end	Cum	1	52.25	5.00	0.04	10.45		
5th cross	Cum	1	56.54	4.20	0.04	9.50		
2nd cross	Cum	1	50.38	4.10	0.04	8.26		
4th cross	Cum	1	50.71	4.20	0.04	8.52		
3rd cross	Cum	1	36.52	4.30	0.04	6.28		
1st cross	Cum	1	82.06	4.50	0.04	14.77		
opposite to 1st cross road	Cum	1	82.50	4.30	0.04	14.19		
SIDDIVINAYAKA LAYOUT								
6th main road	Cum	1	89.10	4.85	0.04	17.29		
4th main road (all cross roads)	Cum	1	412.50	5.20	0.04	85.80		
	Cum	1	58.30	4.30	0.04	10.03		
	Cum	1	55.00	4.40	0.04	9.68		
4th main dead end road ('T' shape road)	Cum	1	170.50	4.40	0.04	30.01		
Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
SAI GARDEN LAYOUT								
1st cross	Cum	1	56.10	4.80	0.04	1.08		
MUNIKALAPPA LAYOUT								
1st Main Road	Cum	1	205.50	5.50	0.04	4.52		
	Cum	1	58.63	5.30	0.04	1.24		
SONAPPA LAYOUT								
4th cross	Cum	1	77.00	4.20	0.04	1.29		
12'A main road (satya green appartment main road)	Cum	1	255.50	4.50	0.04	4.60		
KODIGEHALLI LAYOUT								
3rd main road to dead end	Cum	1	52.25	5.00	0.04	1.05		
5th cross	Cum	1	56.54	4.20	0.04	0.95		
2nd cross	Cum	1	50.38	4.10	0.04	0.83		
4th cross	Cum	1	50.71	4.20	0.04	0.85		
3rd cross	Cum	1	36.52	4.30	0.04	0.63		
1st cross	Cum	1	82.06	4.50	0.04	1.48		
opposite to 1st cross road	Cum	1	82.50	4.30	0.04	1.42		
SIDDIVINAYAKA LAYOUT								
6th main road	Cum	1	89.10	4.85	0.04	1.73		
4th main road (all cross roads)	Cum	1	412.50	5.20	0.04	8.58		
	Cum	1	58.30	4.30	0.04	1.00		
	Cum	1	55.00	4.40	0.04	0.97		

	4th main dead end road ('T' shape road)	Cum	1	170.50	4.40	0.04	3.00		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						**387.32**	**8118.54**	**3144483.89**
15	Providing Plastic to Bituminous concrete @ 8%								
	MUNIKALAPPA LAYOUT								
	8% OF BC	Kg		8%	387.32	117.00	**3625.33**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**3625.33**	**28.62**	**103756.88**
16	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185- I.No.24.15)								
	SAI GARDEN LAYOUT								
	1st cross	Sqm	1	56.10	0.10		5.61		
	MUNIKALAPPA LAYOUT								
	1st Main Road	Sqm	2	205.50	0.10		41.10		
		Sqm	2	58.63	0.10		11.73		
	SONAPPA LAYOUT								
	4th cross	Sqm	2	77.00	0.10		15.40		
	12'A main road (satya green appartment main road)	Sqm	2	255.50	0.10		51.10		
	KODIGEHALLI LAYOUT								
	3rd main road to dead end	Sqm	2	52.25	0.10		10.45		
	5th cross	Sqm	2	56.54	0.10		11.31		
	2nd cross	Sqm	2	50.38	0.10		10.08		
	4th cross	Sqm	2	50.71	0.10		10.14		
	3rd cross	Sqm	2	36.52	0.10		7.30		
	1st cross	Sqm	2	82.06	0.10		16.41		
	opposite to 1st cross road	Sqm	2	82.50	0.10		16.50		
	SIDDIVINAYAKA LAYOUT								
	6th main road	Sqm	2	89.10	0.10		17.82		
	4th main road (all cross roads)	Sqm	2	412.50	0.10		82.50		
		Sqm	2	58.30	0.10		11.66		
		Sqm	2	55.00	0.10		11.00		
	4th main dead end road ('T' shape road)	Sqm	2	170.50	0.10		34.10		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						**364.21**	**542.72**	**197662.97**

17	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18.47)								
	MUNIKALAPPA LAYOUT								
	3rd Cross 2nd phase	Cum	1	71.00	6.00	0.15	63.90		
	Basic rate							781.00	
	Area weightage 6%							46.86	
	Total						**63.90**	**827.86**	**52900.25**
18	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub-base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, (Pg No. 176, Item No. 22.1)								
	MUNIKALAPPA LAYOUT								
	3rd Cross 2nd phase	Cum	1	71.00	6.00	0.15	63.90		
	Basic rate							3761.00	
	Area weightage 6%							225.66	
	Total						**63.90**	**3986.66**	**254747.57**
19	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) (Pg No.177 Item No.22.6.1)								
	MUNIKALAPPA LAYOUT								
	3rd Cross 2nd phase	Cum	1	71.00	6.00	0.15	63.90		
	Consider 5% qty for camber correction for						**3.20**		
	Basic rate							5866.00	
	Area weightage 6%							351.96	
	Total						**67.10**	**6217.96**	**417194.03**
20	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192- I.No.24.57)								
	MUNIKALAPPA LAYOUT								
	3rd Cross 2nd phase	Sqm	2	71.00	0.10		14.20		
	Basic rate							647.00	

	Area weightage 6%							38.82	
	Total						14.20	685.82	9738.64
								TOTAL AMOUNT	**4891475.59**
	Preparation of DPR And Project management Consultancy Charges(2% of estimated cost)								100000
								Miscellenious and rounding	8524
								TOTAL AMOUNT	**5000000**
RUPEES FIFTY LAKHS ONLY									

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

22) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT BALAJI LAYOUT AND SURROUNDING AREA IN WARD NO. 11 (KUVEMPUNAGARA), VIDYARANYAPURA SUB DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 04

(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)

NAME OF WORK : IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT BALAJI LAYOUT AND SURROUNDING AREA IN WARD NO. 11 (KUVEMPUNAGARA), VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.2 : Earthwork in surface excavation in Ordinary soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1(a) / 2.3.1. (P.No. 5/I.No. 2.1)								
	New Drain								
	TEACHERS LAYOUT								
	1st cross ward no 11	Cum	2	77.50	0.60	0.60	55.80		
	Desilting drain								
	SINGAPURA GARDEN								
	4th cross	Cum	1	215.70	0.60	0.40	51.77		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**107.57**	**166.42**	**17901.47**
2	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8(M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 (P.No.12/I.No. 4.3)								
	New Drain								
	TEACHERS LAYOUT								
	1st cross ward no 11	Cum	2	77.50	0.60	0.15	13.95		
	Basic rate							4867.00	
	Area weightage 6%							292.02	
	Total						**13.95**	**5159.02**	**71968.33**
3	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Open Drain (Sides & Bottom)								
	SINGAPURA GARDEN								
	4th cross	Sqm	2	215.70	1.80		776.52		
	Sub Total						**776.52**		
	Consider 5% Qnty for Removing	Sqm					**38.83**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**38.83**	**65.72**	**2551.64**
4	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.2)								
	New Drain								
	TEACHERS LAYOUT								
	1st cross ward no 11								
	At Bottom	Sqm	2	77.50	0.60		93.00		
	At Sides	Sqm	4	77.50	0.60		186.00		
	Sub Total						**279.00**		

	Existing Drain								
	SINGAPURA GARDEN								
	4th cross	Sqm	2	215.70	1.80		776.52		
	Consider 5% Qnty for Removing						**38.83**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**317.83**	**825.74**	**262441.64**
5	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Cover Slab								
	TEACHERS LAYOUT								
	1st cross ward no 11	Sqm	2	77.50	0.60		93.00		
	Basic rate							628.00	
	Area weightage 6%							37.68	
	Total						**93.00**	**665.68**	**61908.24**
6	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14)								
	TEACHERS LAYOUT								
	For New Road								
	1st cross ward no 11	Cum	1	77.50	6.50	0.15	75.56		
	RAJESHWARI LAYOUT								
	Tank Bund road	Cum	1	52.80	5.80	0.15	45.94		
		Cum	1	49.50	6.00	0.15	44.55		
	Basic rate							46.00	
	Area weightage 6%							2.76	
	Total						**166.05**	**48.76**	**8096.52**
7	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1+I.No.6	Cum					273.62		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.5Tonne/Km.) For 15 Kms = (2.5 x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						**273.62**	**122.96**	**33643.88**

8	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305								
	For New Road								
	TEACHERS LAYOUT								
	1st cross ward no 11	Cum	1	77.50	6.50	0.25	125.94		
	RAJESHWARI LAYOUT								
	Tank Bund road	Sqm	1	52.80	5.80	0.25	76.56		
		Sqm	1	49.50	6.00	0.25	74.25		
	Basic rate							302.00	
	Area weightage 6%							18.12	
	Total						**276.75**	**320.12**	**88592.41**
9	Pg. No. 149, Item No. 19.64,KSRRB 300-Compaction KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3								
	For New Road								
	TEACHERS LAYOUT								
	1st cross ward no 11	Sqm	1	77.50	6.50		503.75		
	RAJESHWARI LAYOUT								
	Tank Bund road	Sqm	1	52.80	5.80		306.24		
		Sqm	1	49.50	6.00		297.00		
	Basic rate							5.00	
	Area weightage 6%							0.30	
	Total						**1106.99**	**5.30**	**5867.05**
10	KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18)								
	TEACHERS LAYOUT								
	1st cross ward no 11	Cum	1	77.50	6.50	0.25	125.94		
	RAJESHWARI LAYOUT								
	Tank Bund road	Sqm	1	52.80	5.80	0.25	76.56		
		Sqm	1	49.50	6.00	0.25	74.25		
	Basic rate							1668.00	
	Area weightage 6%							100.08	
	Total						**276.75**	**1768.08**	**489311.72**
11	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	TEACHERS LAYOUT								
	1st cross ward no 11	Sqm	1	77.50	6.50		503.75		
	RAJESHWARI LAYOUT								
	Tank Bund road	Sqm	1	52.80	5.80		306.24		
		Sqm	1	49.50	6.00		297.00		

	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						1106.99	13.78	15254.32
12	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6)								
	Considered same Above Qty	Sqm					1106.99		
	Basic rate							26.00	
	Area weightage 6%							1.56	
	Total						1106.99	27.56	30508.64
13	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6)								
	TEACHERS LAYOUT								
	1st cross ward no 11	Cum	1	77.50	6.50	0.05	25.19		
	RAJESHWARI LAYOUT								
	Tank Bund road	Cum	1	52.80	5.80	0.05	15.31		
		Cum	1	49.50	6.00	0.05	14.85		
	Sub Total						**55.35**		
	Consider 5% qty for Profile correction and Dipression filling						**2.77**		
	Basic rate							6717.00	
	Area weightage 6%							403.02	
	Total						**58.12**	**7120.02**	**413794.02**
14	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	TEACHERS LAYOUT								
	For Road surface								
	1st cross ward no 11	Sqm	1	77.50	6.50		503.75		
	RAJESHWARI LAYOUT								
	For Road surface								
	Tank Bund road	Sqm	1	52.80	5.80		306.24		
		Sqm	1	49.50	6.00		297.00		
	SINGAPURA GARDEN								
	4th cross	Sqm	1	215.70	5.70		1229.49		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**2336.48**	**3.18**	**7430.01**
15	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								
	TEACHERS LAYOUT								

	For Road surface								
	1st cross ward no 11	Sqm	1	77.50	6.50		503.75		
	RAJESHWARI LAYOUT								
	For Road surface								
	Tank Bund road	Sqm	1	52.80	5.80		306.24		
		Sqm	1	49.50	6.00		297.00		
	SINGAPURA GARDEN								
	4th cross	Sqm	1	215.70	5.70		1229.49		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						**2336.48**	**12.72**	**29720.03**
16	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6)								
	TEACHERS LAYOUT								
	1st cross ward no 11	Cum	1	77.50	6.50	0.04	20.15		
	RAJESHWARI LAYOUT								
	Tank Bund road	Cum	1	52.80	5.80	0.04	12.25		
		Cum	1	49.50	6.00	0.04	11.88		
	SINGAPURA GARDEN								
	4th cross	Cum	1	215.70	5.70	0.04	49.18		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	TEACHERS LAYOUT								
	1st cross ward no 11	Cum	1	77.50	6.50	0.04	2.02		
	RAJESHWARI LAYOUT								
	Tank Bund road	Cum	1	52.80	5.80	0.04	1.22		
		Cum	1	49.50	6.00	0.04	1.19		
	SINGAPURA GARDEN								
	4th cross	Cum	1	215.70	5.70	0.04	4.92		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						**102.81**	**8118.54**	**834627.48**
17	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		0.08	102.81	117.00	**962.26**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**962.26**	**28.62**	**27539.76**
18	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185- I.No.24.15)								
	TEACHERS LAYOUT								

	1st cross ward no 11	Sqm	2	77.50	0.10		15.50		
	RAJESHWARI LAYOUT								
	Tank Bund road	Sqm	2	52.80	0.10		10.56		
		Sqm	2	49.50	0.10		9.90		
	SINGAPURA GARDEN								
	4th cross	Sqm	2	215.70	0.10		43.14		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						79.10	542.72	42929.15
								Sub Total	**2444086.33**
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)								50000
								Miscellenious and rounding	5914
								TOTAL AMOUNT	**2500000**
	RUPEES TWENTY FIVE LAKHS ONLY								

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

23) IMPROVEMENTS IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS SINGAPURA PARADISE AND SURROUNDING AREAS IN WARD NO. 11 (KUVEMPUNAGARA), VIDYARANYAPURA SUB DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 04

(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)

NAME OF WORK :IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS SINGAPURA PARADISE AND SURROUNDING AREAS IN WARD NO. 11 (KUVEMPUNAGARA), VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Measurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	SINGAPURA PARADISE								
	Cross Road 5	Cum	2	48.40	0.60	0.40	23.23		
	Cross Road 6 (curve road)	Cum	2	368.50	0.55	0.40	162.14		
	Paradise main road (from chandragathi house #64 to dead end	Cum	1	39.20	0.60	0.40	9.41		
		Cum	2	41.00	0.40	0.40	13.12		
		Cum	2	43.00	0.50	0.40	17.20		
	3rd main and 3rd cross road	Cum	2	143.00	0.45	0.40	51.48		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**276.58**	**166.42**	**46028.44**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Open Drain (Sides & Bottom)								
	SINGAPURA PARADISE								
	Cross Road 5	Sqm	2	48.40	1.80		174.24		
	Cross Road 6 (curve road)	Sqm	2	368.50	1.75		1289.75		
	Paradise main road (from chandragathi house #64 to dead end	Sqm	1	39.20	1.80		70.56		
		Sqm	2	41.00	1.60		131.20		
		Sqm	2	43.00	1.70		146.20		
	3rd main and 3rd cross road	Sqm	2	143.00	1.65		471.90		
	Sub Total						**2283.85**		
	Consider 5% Qnty for Removing	Sqm					**114.19**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**114.19**	**65.72**	**7504.73**
3	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.312)								
	Open Drain (Sides & Bottom)								
	SINGAPURA PARADISE								
	Cross Road 5	Sqm	2	48.40	1.80		174.24		
	Cross Road 6 (curve road)	Sqm	2	368.50	1.75		1289.75		
	Paradise main road (from chandragathi	Sqm	1	39.20	1.80		70.56		
		Sqm	2	41.00	1.60		131.20		

	house #64 to dead end	Sqm	2	43.00	1.70		146.20		
	3rd main and 3rd cross road	Sqm	2	143.00	1.65		471.90		
	Sub Total						**2283.85**		
	Consider 5% Qnty for Refixing	Sqm					**114.19**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**114.19**	**825.74**	**94293.31**
4	KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1)								
	SINGAPURA PARADISE								
	3rd main and 3rd cross road	Cum	1	15.40	4.70	0.23	16.65		
	Basic rate							82.00	
	Area weightage 6%							4.92	
	Total						**16.65**	**86.92**	**1446.99**
5	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1 +I.No.4 + I.No.16	Cum					366.34		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.5Tonne/Km.) For 15 Kms = (2.5x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						**366.34**	**122.96**	**45044.85**
6	KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18)								
	SINGAPURA PARADISE								
	3rd main and 3rd cross road	Cum	1	143.00	4.60	0.23	151.29		
		Cum	1	15.40	4.70	0.23	16.65		
	Basic rate							1668.00	
	Area weightage 6%							100.08	
	Total						**167.94**	**1768.08**	**296933.83**
7	KSRRB 300-50. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by road roller attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM of machineries complete as per specifications. MORTH / Chapter 3(P.No.147, I.No.19.56)								
	SINGAPURA PARADISE								
	Paradise main road (from chandragathi house #64 to dead end	Sqm	1	39.20	4.50		176.40		

	Basic rate							29.00	
	Area weightage 6%							1.74	
	Total						**176.40**	**30.74**	**5422.54**
8	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	SINGAPURA PARADISE								
	3rd main and 3rd cross road	Sqm	1	143.00	4.60		657.80		
		Sqm	1	15.40	4.70		72.38		
	Paradise main road (from chandragathi house #64 to dead end	Sqm	1	39.20	4.50		176.40		
	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						**906.58**	**13.78**	**12492.67**
9	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6)								
	Considered same Above Qty	Sqm					906.58		
	Basic rate							26.00	
	Area weightage 6%							1.56	
	Total						**906.58**	**27.56**	**24985.34**
10	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6)								
	SINGAPURA PARADISE								
	3rd main and 3rd cross road	Cum	1	143.00	4.60	0.05	32.89		
		Cum	1	15.40	4.70	0.05	3.62		
	Paradise main road (from chandragathi	Cum	1	39.20	4.50	0.05	8.82		
	Sub Total						**45.33**		
	Consider 5% qty for Profile correction and Dipression filling						**2.2665**		
	Basic rate							6717.00	
	Area weightage 6%							403.02	
	Total						**47.60**	**7120.02**	**338880.56**
11	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	SINGAPURA PARADISE								
	For Road surface								
	Cross Road 5	Sqm	1	48.40	4.80		232.32		
	Cross Road 6 (curve road)	Sqm	1	368.50	5.20		1916.20		
	3rd main and 3rd cross	Sqm	1	143.00	4.60		657.80		

	road	Sqm	1	24.20	4.70		113.74		
		Sqm	1	15.40	4.70		72.38		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**2992.44**	**3.18**	**9515.96**
12	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								
	SINGAPURA PARADISE								
	For Road surface								
	Cross Road 5	Sqm	1	48.40	4.80		232.32		
	Cross Road 6 (curve road)	Sqm	1	368.50	5.20		1916.20		
	3rd main and 3rd cross road	Sqm	1	143.00	4.60		657.80		
		Sqm	1	24.20	4.70		113.74		
		Sqm	1	15.40	4.70		72.38		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						**2992.44**	**12.72**	**38063.84**
13	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6)								
	SINGAPURA PARADISE								
	Cross Road 5	Cum	1	48.40	4.80	0.04	9.29		
	Cross Road 6 (curve road)	Cum	1	368.50	5.20	0.04	76.65		
	3rd main and 3rd cross road	Cum	1	143.00	4.60	0.04	26.31		
		Cum	1	24.20	4.70	0.04	4.55		
		Cum	1	15.40	4.70	0.04	2.90		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	SINGAPURA PARADISE								
	Cross Road 5	Cum	1	48.40	4.80	0.04	0.93		
	Cross Road 6 (curve road)	Cum	1	368.50	5.20	0.04	7.66		
	3rd main and 3rd cross road	Cum	1	143.00	4.60	0.04	2.63		
		Cum	1	24.20	4.70	0.04	0.45		
		Cum	1	15.40	4.70	0.04	0.29		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						**131.67**	**8118.54**	**1068946.73**
14	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC			0.08	131.67	117.00	**1232.41**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**1232.41**	**28.62**	**35271.47**

15	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185- I.No.24.15)								
	SINGAPURA PARADISE								
	Cross Road 5	Sqm	2	48.40	0.10		9.68		
	Cross Road 6 (curve road)	Sqm	2	368.50	0.10		73.70		
	3rd main and 3rd cross road	Sqm	2	143.00	0.10		28.60		
		Sqm	2	24.20	0.10		4.84		
		Sqm	2	15.40	0.10		3.08		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						**119.90**	**542.72**	**65072.13**
16	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18.47)								
	SINGAPURA PARADISE								
	Paradise main road (from chandragathi house #64 to dead end	Cum	1	39.20	4.50	0.15	26.46		
		Cum	1	41.00	3.60	0.15	22.14		
		Cum	1	43.00	3.80	0.15	24.51		
	Basic rate							781.00	
	Area weightage 6%							46.86	
	Total						**73.11**	**827.86**	**60524.84**
17	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, Item No. 22.1, Pg No. 176								
	SINGAPURA PARADISE								
	Paradise main road (from chandragathi house #64 to dead end	Cum	1	39.20	4.50	0.15	26.46		
		Cum	1	41.00	3.60	0.15	22.14		
		Cum	1	43.00	3.80	0.15	24.51		
	Basic rate							3761.00	
	Area weightage 6%							225.66	
	Total						**73.11**	**3986.66**	**291464.71**
18	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Pg No.177 Item No.22.6.1								
	SINGAPURA PARADISE								
	Paradise main road	Cum	1	39.20	4.50	0.15	26.46		

	(from chandragathi house #64 to dead end	Cum	1	41.00	3.60	0.15	22.14		
		Cum	1	43.00	3.80	0.15	24.51		
	Sub Total						**73.11**		
	Consider 5% qty for camber correction						**3.66**		
	Basic rate							5866.00	
	Area weightage 6%							351.96	
	Total						**76.77**	**6217.96**	**477324.81**
19	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192- I.No.24.57)								
	SINGAPURA PARADISE								
	Paradise main road (from chandragathi house #64 to dead end	Sqm	2	39.20	0.10		7.84		
		Sqm	2	41.00	0.10		8.20		
		Sqm	2	43.00	0.10		8.60		
	Basic rate							647.00	
	Area weightage 6%							38.82	
	Total						**24.64**	**685.82**	**16898.60**
								Sub Total	**2936116.36**
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)								60000
	Miscellenious and rounding								3884
	TOTAL AMOUNT								**3000000**
	RUPEES THIRTY LAKHS ONLY								

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97